UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/600,335	07/14/2000	Michael Koblbauer	951/48953	2648

23911 7590 12/18/2002

CROWELL & MORING LLP
INTELLECTUAL PROPERTY GROUP
P.O. BOX 14300
WASHINGTON, DC 20044-4300

EXAMINER
YANG, CLARA I

ART UNIT	PAPER NUMBER
2635	8

DATE MAILED: 12/18/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

HG

Office Action Summary	Application No. 09/600,335	Applicant(s) KOBLBAUER, MICHAEL	
	Examiner Clara Yang	Art Unit 2635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 July 2000* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *13-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *13-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *14 July 2000* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *08* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the constructional unit formed by a mechanical key and vehicle-fixed memory and how it fits into the activating unit (as described in Claim 30) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 17 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Both claims contain the limitation "the method mechanically unlocks a vehicle-fixed memory to provide an access authorization code." It is unclear where the vehicle-fixed memory is contained and from what it is unlocked. From the specifications, it is understood that the vehicle-fixed memory is contained within the activating unit.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 13 - 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Schuermann U.S. Patent No. 5,552,789.

Schuermann teaches a method for operating a vehicle in which access authorization is determined via a dialog between a control device fixed in the vehicle (called a "TIRIS reader") and an authorization verification device (called a "key transponder") carried by a user (see Col. 6, lines 60 - 63 and Col. 8, lines 54 - 63). Schuermann further imparts that the key transponder, in combination with the mechanical aspects of the key, is used to provide ignition control, wherein the vehicle will not start or continue to run (if started) until the proper identification code is provided to the vehicle ignition control module (see Col. 7, lines 4 - 9). Here it is understood that a separate interrogation process for starting the vehicle begins when the mechanical key is inserted into the ignition lock. Schuermann also discloses that the TIRIS reader regularly interrogates the transponders installed in the vehicle (see Fig. 1, transponders 20_1 to 20_n) and the key transponder (see Fig. 1, key 22) at regular time intervals (see Col. 8, lines 46 - 48). Here it is understood that the interrogation of the key transponder occurs while the vehicle is operating.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 17 - 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schuermann U.S. Patent No. 5,552,789 in view of Yoshida et al. U.S. Patent No. 5,595,257.

Regarding Claims 17 and 18, Schuermann fails to teach the method wherein a vehicle-fixed memory device is unlocked from the vehicle to provide an access authorization code in the event of an unsuccessful interrogation. Though Schuermann is also silent on the use of a backup authorization verification device (or a vehicle-fixed memory device), those of ordinary skill in the art recognize that the use of a backup device is conventional. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Schuermann' system such that it had a backup authorization verification device, because it is advantageous to have a backup device in the event of the first transponder's failure. In an analogous art, Yoshida's control apparatus for a vehicle has a compartment (see Fig. 16, opening portion 422) for holding a key 424 that includes a key member 426 and a main body 428 (see Fig. 21 and 22), thus enhancing security by hiding and protecting the key. Main body 428 has a non-contact IC card 436 on the surface that contains the key's recital code (see Col.12, lines 15 - 23). Because key 424 has an IC card for containing an access code, it is understood that key 424 is a vehicle-fixed memory device. When the engine is stopped, the vehicle-fixed memory device is ejected or mechanically unlocked from the compartment (see

Col. 17, lines 15 - 20), thus releasing the vehicle-fixed memory device. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Schuermann's system such that a backup device for the transponder is stored in the vehicle and ejected when the engine is stopped (i.e. the vehicle control device determines that the transponder's code is invalid) as suggested by Yoshida, because it is desirable to hide and secure the back-up vehicle-fixed memory device in a discrete location to prevent unauthorized users from using or stealing it while enabling the user to access the backup device in the event of the first transponder's failure.

Regarding Claims 19 - 22, Schuermann fails to impart the act of conspicuously informing the user of the mechanical unlocking of the vehicle-fixed memory device via a visual signal and/or an acoustical signal. Yoshida's vehicle controller, however, has an alarm display portion 404 and a multi-display portion 410 for displaying various alarms, as shown in Fig. 16, in order to alert the user of abnormal or dangerous conditions (see Col. 10, lines 10 - 13). Yoshida teaches that a "CARD" alarm is generated when the card is falling out during operation of the vehicle (see Col. 14, lines 28 - 35). Here it is understood that the "CARD" alarm is indicated either by alarm display portion 404 and/or multi-display portion 410. Because a pair of lock plates prevents the fallout of key 426 (see Col. 10, lines 15 - 18), it is understood that the fallout of the key is caused by the unlocking of the lock plates. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Schuermann's method as taught by Yoshida, because Yoshida's method enhances a user's safety.

Regarding Claims 23 and 24, Schuermann is silent on the act of ejecting the vehicle-fixed memory device from a storage location when the vehicle drive unit is switched off. As means

for preventing the theft of the key while the vehicle has been turned off, Yoshida expresses that the vehicle-fixed memory device is ejected or mechanically unlocked from the compartment when the engine is stopped, (see Col. 17, lines 15 - 20), thus releasing the vehicle-fixed memory device and allowing the user to remove and take the key with him/her. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Schuermann's method as taught by Yoshida, because Yoshida's method enhances a vehicle security.

Referring to Claims 25, 26, 29, and 30, Schuermann's system for carrying out the method described above in Claim 1, as shown in Fig. 1, comprises a TIRIS reader 10 that works in conjunction with processor 33 (see Col. 7, lines 63 - 66 and Col. 8, lines 1 - 8). Here it is understood that TIRIS reader 10 and processor 33 form an activating unit. Schuermann's system lacks a vehicle-fixed memory device that: (a) fits into the activating unit; (b) is unlocked from the activating unit to provide an access authorization code in the event of an unsuccessful interrogation; and (c) forms a constructional unit with a mechanical key. Though Schuermann's system lacks a backup authorization verification device (or a vehicle-fixed memory device) that is used to extract an access verification authorization code when the key transponder fails, those of ordinary skill in the art recognizes that the use of a backup device is conventional. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Schuermann's system such that it had a backup authorization verification device (or a vehicle-fixed memory device), because it is advantageous to have backup means in the event of the first transponder's failure. In an analogous art, Yoshida's control apparatus for a vehicle has a compartment (see Fig. 16, opening portion 422) for holding a key 424 that includes a key member 426 and a main body 428 (see Fig. 21 and 22), thus enhancing security

by hiding and protecting the key. Here it is understood that the control apparatus is an activating unit. Main body 428 of the key has a non-contact IC card 436 on the surface that contains the key's recital code (see Col.12, lines 15 - 23). Here it is understood that the recital code is an access verification authorization code (or access code). Because key 424 has an IC card for containing an access code, it is understood that key 424 is a vehicle-fixed memory device. As shown in Fig. 21, a mechanical key (or key member 426) and the vehicle-fixed memory device form a constructional unit that fits into the activating unit via opening portion 422 in Fig. 16. When the engine is stopped, the vehicle-fixed memory device is ejected or mechanically unlocked from the compartment (see Col. 17, lines 15 - 20), thus releasing the vehicle-fixed memory device from the activating unit. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Schuermann's system such that a backup device is stored in the vehicle and ejected when the engine is stopped (i.e. the vehicle control device determines that the transponder's code is invalid) as suggested by Yoshida, because it is desirable to hide and secure the backup vehicle-fixed memory device in a discrete location to prevent unauthorized users from using or stealing it while enabling the user to access the backup device in the event of the first transponder's failure.

9. Claims 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schuermann U.S. Patent No. 5,552,789 and Yoshida et al. U.S. Patent No. 5,595,257 as applied to claims 25 and 26 above, and further in view of Elajmi et al. WO 94/18580.

Schuermann and Yoshida fail to teach an authorization verification device (or transponder) that is able to accept an inserted vehicle-fixed memory device. Elajmi teaches a mobile transponder that can accommodate a removable memory card on which it can read or write data (see Abstract), thus providing a simple means for replacing the memory of the

transponder. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the transponder of Schuermann and Yoshida as taught by Elajmi, because a transponder with a removable memory card enables a user to easily replace the memory if it is defective.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Tanaka U.S. Patent No. 5,079,435: Tanaka's vehicle anti-theft system has backup means in the event when the electronic key is unable to function properly.
- Clemens U.S. Patent No. 5,412,378: Clemens teaches a vehicular anti-theft protection apparatus comprising a vehicular control unit and a magnetic control key that is inserted into the vehicular control unit to start the car.
- Khangura et al. U.S. Patent No. 5,539,260: Khangura's vehicular security system teaches interrogation between the vehicle control module and transponder during operation of the engine.
- Kennedy et al. U.S. Patent No. 5,659,291: Kennedy imparts an audible key-in-ignition reminder system.
- Lambropoulos U.S. Patent No. 5,736,953: Lambropoulos imparts a keyless vehicle entry system that performs an interrogation process for unlocking a door and a separate interrogation process for starting the vehicle.
- Zimmer U.S. Patent No. 6,064,298: Zimmer's antitheft system for a vehicle performs an interrogation process for unlocking a door and a separate interrogation process for starting the vehicle upon insertion of a key into the ignition lock and turning of the key.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clara Yang whose telephone number is (703) 305-4086. The examiner can normally be reached on 8:30 AM - 7:00 PM, Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on (703) 305-4704. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 350-3900.

CY
November 7, 2002

BRIAN ZIMMERMAN
PRIMARY EXAMINER